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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/058,306 | 01/30/2002 | Syuji Mayama | 111857 | 7355 |

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EXAMINER

NGUYEN, MINH T

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 06/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

10/058,306

MAYAMA ET AL.

Examiner

Minh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,14 and 15 is/are rejected.
- 7) ☒ Claim(s) 3-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 30 April 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicants' amendment filed on 4/30/03 has been received and entered in the case.

Claims 1-15 are pending. New grounds of rejections necessitated by the amendment are set forth below. This action is FINAL.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification does not disclose which structures constitute the switching means, control signal supply means, power voltage supply means recited in claim 14.

Claim Objections

3. Claims 5 and 8 are objected to because of the following informalities: since the terms "power supply voltage" are changed in claim 1, the corresponding changes should be updated in the dependent claims, i.e., claims 5 and 8. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim is rejected because of the problems noted in section 2 above. It is suggested that the specification is amended to explicitly state what structures corresponding to the recited means, provided no new matter is introduced.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,928,053, issued to Sicard et al.

As per claim 1, Sicard discloses a semiconductor circuit component (Fig. 1) capable of being driven when an externally provided switch unit (the switch unit which supplies the control signal to node 4, not shown) is turned on to supply a first power supply voltage (the power supply voltage VS when transistor N2 is OFF) to said semiconductor circuit component, said semiconductor circuit component comprising:

a load-control semiconductor switching device (2) with a control terminal (the gate);

a control signal supply circuit (transistor P1) for supplying a control signal (the control signal at the gate of transistor 2) to said control terminal (the gate of transistor 2) of said load

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control semiconductor switching device 2 to drive said load-control semiconductor switching device; and

a drive control circuit (circuit block 3 and N2) for controlling the control signal supply circuit (P1) in a manner so that, only when said switch unit is turned on, a second power supply voltage (the power supply voltage VS when N2 is ON) is supplied from said drive control circuit to said control signal supply circuit to make said control signal supply circuit output the control signal (column 3, lines 55-62).

As per claim 2, Sicard further discloses said drive control circuit is disposed between a the first and second power supply voltages (since the first and second power supply voltages are applied to the drive control circuit) and in series with said switch unit (since there is a path between the node 4, transistor N2 and ground), so that only when said switch unit is turned on, the second power supply voltage is supplied from said drive control circuit to said control signal supply circuit (the second power supply voltage is applied to the gate of transistor 2 through transistor P1).

As per claim 14, this claim is rejected for the same reasons noted in claim 1.

As per claim 15, this claim is merely a method to operate the circuit having elements and connections noted in claim 1, since Sicard teaches the circuit, he inherently teaches the recited step.

Response to Arguments

6. Applicant's arguments filed 4/30/03 have been fully considered but they are not persuasive.

Regarding the argument that Sicard discloses a logic signal, not the power supply voltage. As is well-known in the art, a logic signal is not a power supply voltage.

The Examiner notes that since the circuit block 3 is a multiplier circuit (column 3, lines 28-32), it is proper to consider VS is the power supply voltage.

Allowable Subject Matter

7. Claims 3-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3-8 are allowable because the prior art of record fails to disclose or suggest a driver control circuit having the specific structure recited in claim 3.

Claims 9-13 are allowable for the reasons noted in the previous Office Action.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is 703-306-9179. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Minh Nguyen
Primary Examiner
Art Unit 2816